

IN THE CLAIMS:

Please amend Claims 1, 2 and 7 as follows: The claims, as pending in the subject application, read as follows:

1. (Currently Amended) A quantization method in which quantization processing is applied to data for first and second recording means which record input image data in a plurality of gradations which belong to each of different gradations in substantially the same hue, comprising the steps of:

inputting multi-value level image data;

a first quantization step of performing quantization of the image data input for the first recording means to data with 3 or more levels which are a lower level than that of the input image data, the first quantization step performing the quantization by conducting error correction; and

a second quantization step of performing quantization of the image data input for the second recording means to data with 3 or more levels which are a lower level than that of the input image data, the second quantization step performing the quantization without conducting error correction,

wherein at least one of the first and second quantization steps performs quantization of the input image data of one pixel to multi-value data with 3 or more levels, so that the corresponding one of the first and second recording means may record the image in a plurality of gradations,

wherein in the first and second quantization steps, one pixel of the image data is quantized so as to be able to record one pixel with 5 or more levels and upon

recording with a predetermined level of the 5 or more levels, both of the first recording means and the second recording means are used, and

wherein the first recording means records the image with lower density recording material than that used by the second recording means.

2. (Currently Amended) A recording apparatus which includes first and second recording means which record input image data in a plurality of gradations which belong to each of different gradations in substantially the same hue, comprising:

input means for inputting multi-value level image data;

first quantization means for performing quantization of the image data input for the first recording means to a data with 3 or more levels which are a lower level than that of the input image data, the first quantization means performing the quantization by conducting error correction; and

second quantization means for performing quantization of the image data input for the second recording means to a data with 3 or more levels which are a lower level than that of the input image data, the second quantization means performing the quantization without conducting error correction,

wherein the first and second recording means record the input image data respectively in first and second gradations according to a quantization result from the first quantization means, at least one of the first and second quantization means performs quantization of the input image data of one pixel to multi-value data with 3 or more levels and the corresponding one of the first and second recording means record the image in a plurality of gradations,

wherein in the first and second quantization steps, one pixel of the image data is quantized so as to be able to record one pixel with 5 or more levels and upon recording with a predetermined level of the 5 or more levels, both of the first recording means and the second recording means are used, and

wherein the first recording means records the image with lower density recording material than that used by the second recording means.

3. (Original) The recording apparatus according to claim 2, wherein the first and second recording means record the image by an ink-jet system in which recording is effected by attaching an ink drop onto a recording medium.

4. (Original) The recording apparatus according to claim 3, wherein the first and second recording means record the image with light ink and black ink.

5. (Original) The recording apparatus according to claim 4, wherein a size of the ink drop is controlled when the first and second recording means effect recording in a plurality of gradations.

6. (Original) The recording apparatus according to claim 2, wherein not only recording is executed by using both of the first and second recording means according to a level of the input image data, but the first and second recording means share a region in which both means effect recording while both raising recording levels.

7. (Currently Amended) A storage medium from which a computer can readout a control program which is used for performing quantization of data for first and second recording means which record input image data in a plurality of gradations which belong to each of different gradations in substantially the same hue, comprising:

a first quantization step module for performing quantization of the image data input for the first recording means to data with 3 or more levels which are a lower level than that of the input image data, the first quantization step performing the quantization by conducting error correction;

a second quantization step module for performing quantization of the image data input for the second recording means to data with 3 or more levels which are a lower level than that of the input image data, the second quantization step performing the quantization without conducting error correction; and

an output step module for outputting results from the first and second quantization steps, wherein one of the first and second quantization step modules perform quantization of the input image data of one pixel to multi-value data with 3 or more levels so that the corresponding one of the first and second recording means may record the image in a plurality of gradations,

wherein in the first and second quantization steps, one pixel of the image data is quantized so as to be able to record one pixel with 5 or more levels and upon recording with a predetermined level of the 5 or more levels, both of the first recording means and the second recording means are used, and

wherein the first recording means records the image with lower density recording material than that used by the second recording means.

8. (Previously Presented) The quantization method according to Claim 1, wherein in said first quantization step, quantization of the image data is performed by using an error diffusion method, and in said second quantization step, quantization of the image data is performed by using a dither method.

9. (Previously Presented) The recording apparatus according to Claim 2, wherein quantization of the image data by the first quantization means is performed by using an error diffusion method, and quantization of the image data by the second quantization means is performed by using a dither method.

10. (Previously Presented) The storage medium according to Claim 7, wherein in said first quantization step, quantization of the image data is performed by using an error diffusion method, and in said second quantization step, quantization of the image data is performed by using a dither method.

11. and 12. (Canceled)